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Figure 1

Map of Human IL-17 Like cDNA (SEQ ID NO:1) and
Amino Acid (SEQ ID NO:2) Sequences

1	CTCAAGTCACTCCCTAAAAAAGACAGTGGAAATAAATTTGAATAAAACAAACAGGCTTGCT	
61	GAAAAATAAATCAGGACTCCTAAACCTGCTCCAGTCAGCCTGCTTCCACGAGGCCCTGTCTAG	
121	TCAAGTCCCCCACTTGTGACTGAGTGTGAGTGCCAGTGCCACGATGTACCAGGTGGTTGCATTCT	
1		M Y Q V V A F L
181	TGGCAATGGTCAATGGGAACCCACACCTACAGCCCACTGGCCCCAGCTGCTGCCCCAGCAAAG	8
9	A M V M G T H T Y S H W P S C C P S K G	28
241	GGCAGGACACCTCTGAGGAGCTGCTGAGGTGGAGCACTGTGCTGTGCTTCCCCCTAGAGC	
29	Q D T S E E L L R W S T V P V P L E P	48
301	CTGCTAGGCCCAACCGCCACCCAGAGTCCTGTAGGGCCAGTGAAGATGGACCCCTCAACA	
49	A R P N R H P E S C R A S E D G P L N S	68
361	GCAGGGCCATCTCCCCCTGGAGATATGAGTTGGACAGAGACTTGAACCGGCTCCCCCAGG	
69	R A I S P W R Y E L D R D L N R L P Q D	88
421	ACCTGTACCACGCCCGTTGCCCTGTGCCCGCACTGCGTCAGCCTACAGACAGGCTCCCCACA	
89	L Y H A R C L C P H C V S L Q T G S H M	108
481	TGGACCCCCGGGCAACTCGGAGCTGCTCTACCAACAACCCAGACTGTCTTCTACCGCGGC	
109	D P R G N S E L L Y H N Q T V F Y R R P	128
541	CATGCCATGGCGAAGGGCACCCACAGGGCTACTGCTTGGAGCGCAGGCTGTACCGTG	
129	C H G E K G T H K G Y C L E R R L Y R V	148
601	TTTCCTTAGCTTGTGTGTGTCGGCCCCCGTGTGATGGGCTAG	643
149	S L A C V C V R P R V M G * 162	

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Figure 2A

(Map of Mouse IL-17 Like cDNA (SEQ ID NO:3) and Amino Acid
(SEQ ID NO:4) Sequences with Predicted Signal Peptide

1	ATGTACCAGGCTGTTGCATCTTGGCAATGATCGTGGAAACCCACACCCGTCAGCTTG	19
	M Y Q A V A F L A M I V G T H T V S L	
58	CGGATCCAGGAGGGCTGCAGTCACTTGCCACAGCTGCTGCCCCAGCAAGAGCAAGAACCC	39
111	R I Q E G C S H L P S C C P S K E Q E P	
118	CCGGAGGAGTGGCTGAAGTGGAGCTCTGCATCTGTGTCCCCCCCAGAGCCCTCTGAGCCAC	59
31	P E E W L K W S S A S V S P P E P L S H	
178	ACCCACCACGAGAATCCTGCAGGGCCAGCAAGGATGGCCCCCTCAACAGCAGGGGCCATC	79
51	T H H A E S C R A S K D G P L N S R A I	
238	TCTCCTTGGAGCTATGAGTTGGACAGGACTTGAATCGGGTCCCCCAGGACCTGTACCAC	99
71	S P W S Y E L D R D L N R V P Q D L Y H	
298	GCTCGATGCTGTGCCACACTGCGTCAGCCTACAGACAGGCTCCCACATGGACCCGCTG	119
91	A R C L C P H C V S L Q T G S H M D P L	
358	GGCAACTCCGTCCCACCTTACCACAACCAGACGGTCTTCTACCGCGGCCATGCCATGGC	139
111	G N S V P L Y H N Q T V F Y R R P C H G	
418	GAGGAAGGTACCCATCGCCGCTACTGCTTGGAGCGCAGGCTCTACCGAGTCTCCTTGGCT	159
131	E E G T H R R Y C L E R R L Y R V S L A	
478	TGTGTGTGTGCGGCCCCGGTCAATGGCTTAGTCATGCTCACACCTGCCTGAGGCTGA	170
160	C V C V R P R V M A *	
538	TGCCCGGTTGGGAGAGAGGGCCAGGTGTACATACCTTGCCAAATGCGGGCCGGTTCAA	
598	GCCCTCCAAAGCCCTACCTGAAGCAGCAGGCTCCCGGACAAAGATGGAGGACTTGGGGAG	
658	AAACTGTGACTTTTGCACTTTTGGGAAGCACCTTTTGGGAAGGAGCAGGTTCCCGCTTGTGC	

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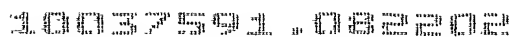


Figure 2B

Map of Non-Secreted Form of Mouse IL-17 Like cDNA (SEQ ID NO:9), and
Corresponding Amino Acid Sequence (SEQ ID NO:10)

1	CCGGCAGGTGCCCTCGGCGGTCCTCCAAAGCTTAGGGAAGCTCCAGGTGCTTTGGGAAAT	
61	GAAGAAAAGGCCACCCAGCAAAAAGAAACAGAGAAGGGAGGAGCAGTGTCTGGGCTC	
121	GCCTAGGGTCGAGGGCCATTATCACCTACAAATCAGAAATGTGGAGTGCTATTCTAGAGG	
181	TTCTCCATCTTTGCCATTGCTGGTCTGCTCAGAAAAGTGTGATGGGTTGTCCCATTTGCCA	
241	AGAACAGCTTCTGCTTACCAGCAGGTGCTGACCTCTTTCCCCAGAGGCACAGGGAAGAA	
301	TTCCAGCCCCGGTTGGCTGCCAGAGGCTTCTCTGGCGTTGGGTACAGAGGCAGAGAAAG	
361	AAACCCCAATGTCTCTATGAAAAACAATGTCCCCCGTCATCCAGGCCAGATCATTTCTGC	
421	AGTGTCAACAGTTGAGACAAGAAGCTGGGTCAATTTCTGTGCTTAAAGAGTGCCCTGTTCT	
481	GCAC TGGCCAAGGCTGTTGCATTCTTTGGCAATGATCGTGGGAACCCACACCCGTCAAGCTTG	
	M I V G T H T V S L	10
541	CGGATCCAGGAGGCTGCAGTCACTTGCCCAGCTGCTGCCCCAGCAAAAGAGCAAGAACCC	
11	R I O E G C S H L P S C C P S K E Q E P	30

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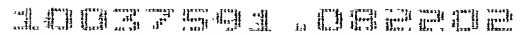


Figure 2C

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Figure 3A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L (SEQ ID NO:2),
with a Known Human IL-17 Family Member Amino Acid Sequence, hIL-17

(SEQ ID NO:5)

Smith-Waterman score: 155; 25.0% identity in 160 AA overlap

hIL-17L	XNQDSXPAPVSLPRGLSVSAPLVTECAVPSMYQVVAFLAMVMGHTYSHWPSCCPKSGQ	10	20	30	40	50	60
hIL-17	MTPGKTSLSVSLLLLSLEAIVKAGITIPRNP GCPNSEDK	10	20	30	40	50	60
hIL-17L	DTSEELLRWSTVPVPPLEPARPNRHPESCRASEDGPLNSRAISPWRYELDRDLNRLPQDL	70	80	90	100	110	120
hIL-17	NFPRTVMVNLNI-----HNRNTNTNPK--RSSD---YYNRSTSPWNLHRNEDPERYPSPVI	40	50	60	70	80	

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Figure 4

Pile-Up of Human IL-17 like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with a Known Human IL-20 Amino Acid Sequence, hIL-20 (SEQ ID NO:6)

SCORES Init1: 124 Initn: 124 Opt: 175

Smith-Waterman score: 175; 36.7% identity in 90 aa overlap

hIL-17L	70	80	90	100	110	120
	RWSTVPVP	PLEPARPNRHP	ESCRA	SGPLNSRAIS	PWRYELDRDLNRL	PQDLYHARCLC
hIL-20	70	80	90	100	110	120
	RNIEEMVAQL	RNSSELAQRKCE	VNLQLWMSNKRSL	SPWGY	SINHDP	SRIPVDLPEARCLC
hIL-17L	130	140	150	160	170	180
	PHCVSLQ	TGSHMDPLGNSV	PLYHNQ	TVFYRRP	CHGEGTHRRYCL	ERRLYRVSLA-CVCV
hIL-20	130	140	150	160	170	180
	LGC	VNPFTMQE-DRSMV	SVVPVF-SQV	PVRRRLCP	PPPTGP--CRQ	RAVMTIVAGCTCI
hIL-17L	190					
	RPRVMA					
hIL-20						
	F					

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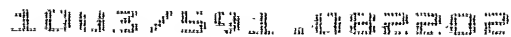


Figure 5

SCORES Init1: 124 Initn: 124 Opt: 178
Smith-Waterman score: 178; 35.6% identity in 90 aa overlap

hIL-17L		70	80	90	100	110	120	
	RWSTVPVPLEPARPNRHPE	SCRA	SEDG	PLNS	RAIS	PWRYELDRDLNRLPQDLYHARCLC		
hIL-17b		70	80	90	100	110	120	
	RNIEEMVAQLRNSSELAQRKCEVN	LQLWMSNKRSLS	PWGYSINHDP	SRI	PVDLP	PEARCLC		
hIL-17L		130	140	150	160	170	180	
	PHCVSLQTGSHMDPLGNSVPL	YHNQT	VFYRRPC	HGEETHRRYCLE	RRLYR-VSLACVCV			
hIL-17b		130	140	150	160	170	180	
	: : :	: : :	: : :	: : :	: : :	: : :	: : :	
	LGCVNPF	TMQE-DRSMVSV	VPF-SQVPVRRRLCP	PPRTGP--CRQRAVMETIAVGCTCI				

hIL-17L

hIL-17b

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Figure 6A

Pile-Up of Human IL-17 Like Amino Acid Sequence, hIL-17L, (SEQ ID NO:2)
with Amino Acid Sequence of a Known Human IL-17 Family Member,
hIL-17c (SEQ ID NO:8)

SCORES Init1: 149 Initn: 194 Opt: 236

Smith-Waterman score: 243; 34.5% identity in 171 aa overlap

hIL-17L	20	30	40	50	60	69
	GLSVSAPLVTECAVPSMYQVVAF	LAMVMGTH	TYSHW-PSCCPSK	----	GQDTSEELLR	--
hIL-17c	10	20	30	40	50	
	MTLLPGLLFLTWLHTCLAHHDPSLRGHPHSHGTPHCYSAEELPLGQAPPHLLARGA					
hIL-17L	70	80	90	100	110	
	-WS-TVPVP----	PLEPARP-NRH--	PES----	C---RASE--	DGPLNSRAIS	PWRYELDRD
hIL-17c	60	70	80	90	100	110
	KWGQALPVALVSSLEAASHRGRHERPSATTQCPVLRPEEVLEADTHQRSIS	PWRYRVD	TD			

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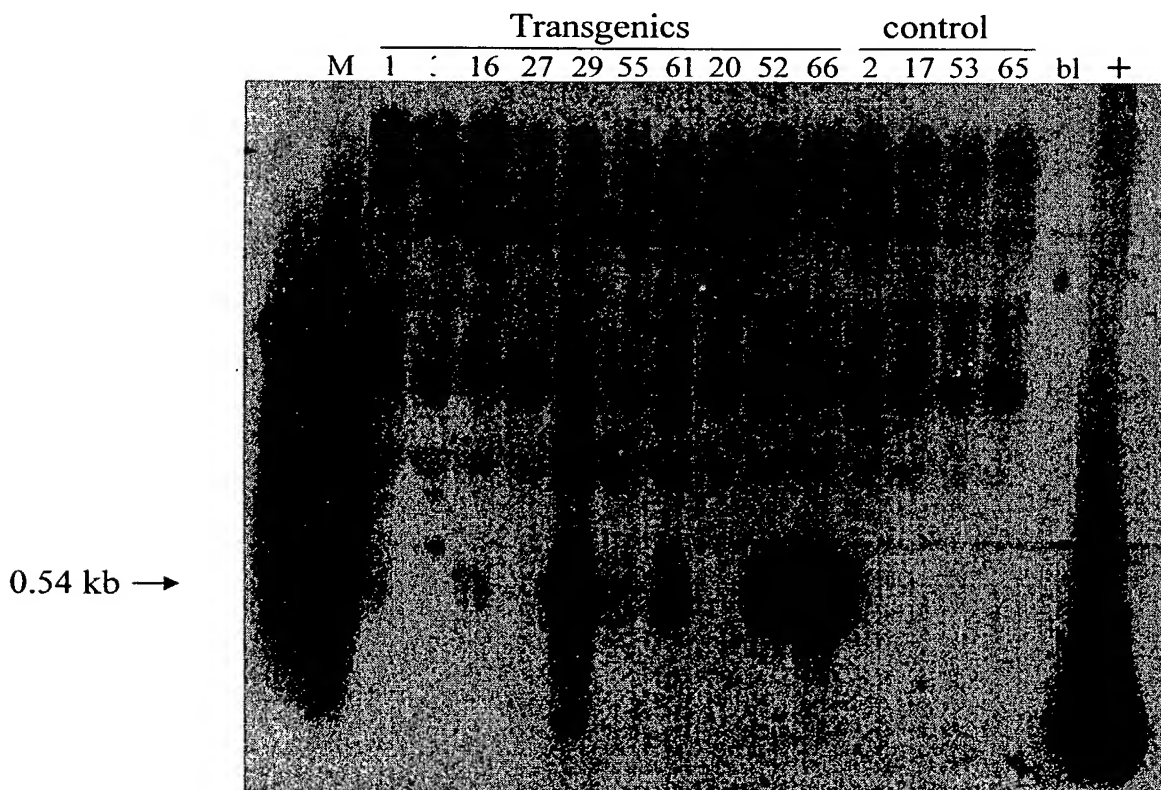
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Figure 7

Northern Blot Expression Analysis of TH00-018 Necropsied Transgenic Founders



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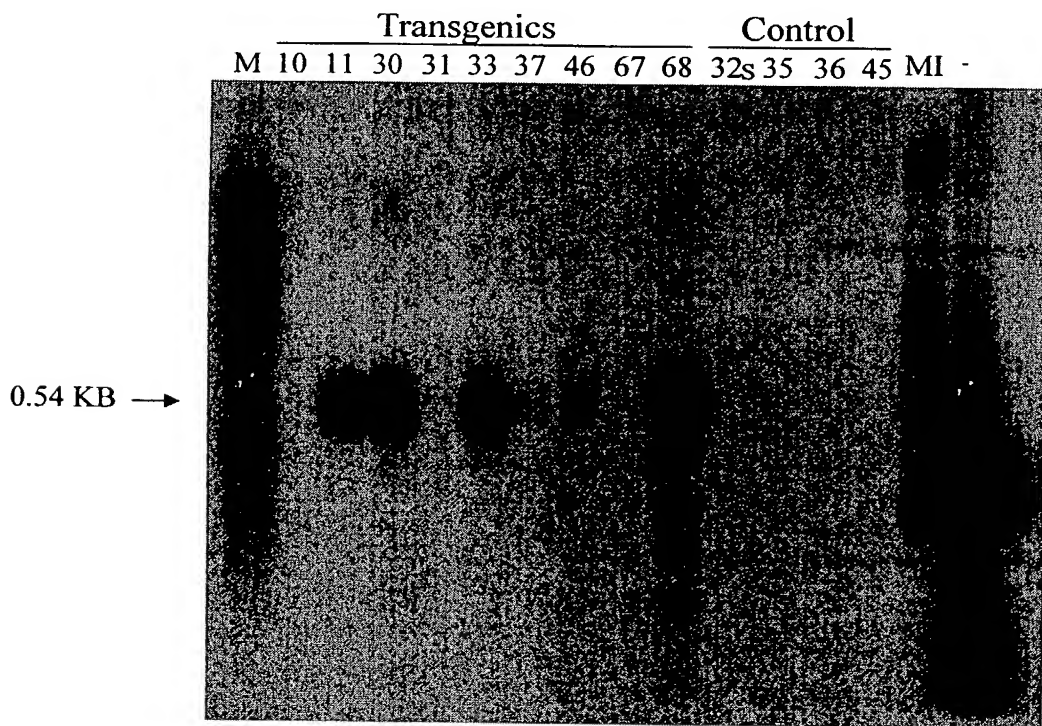
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Figure 8

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Northern Blot Expression Analysis of TH00-018
Hepatectomized Transgenic Founders



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Figure 9

Non-Transgenics

IL-17E Transgenics

A

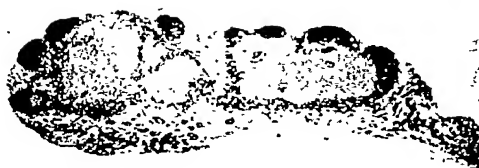


Lymph Node

B



C



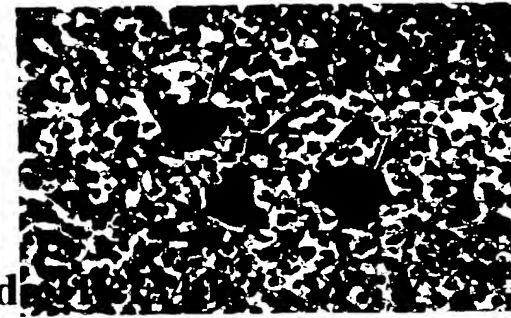
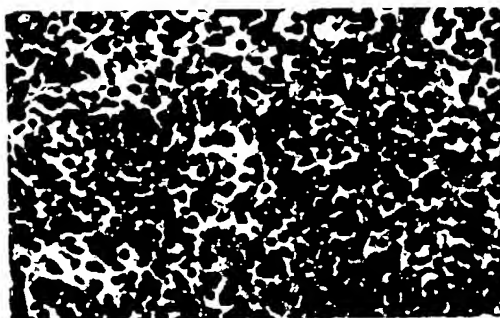
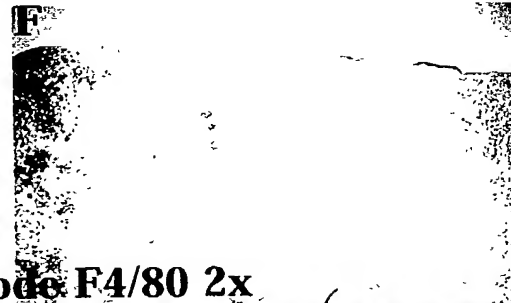
Lymph Node B220 2x



E



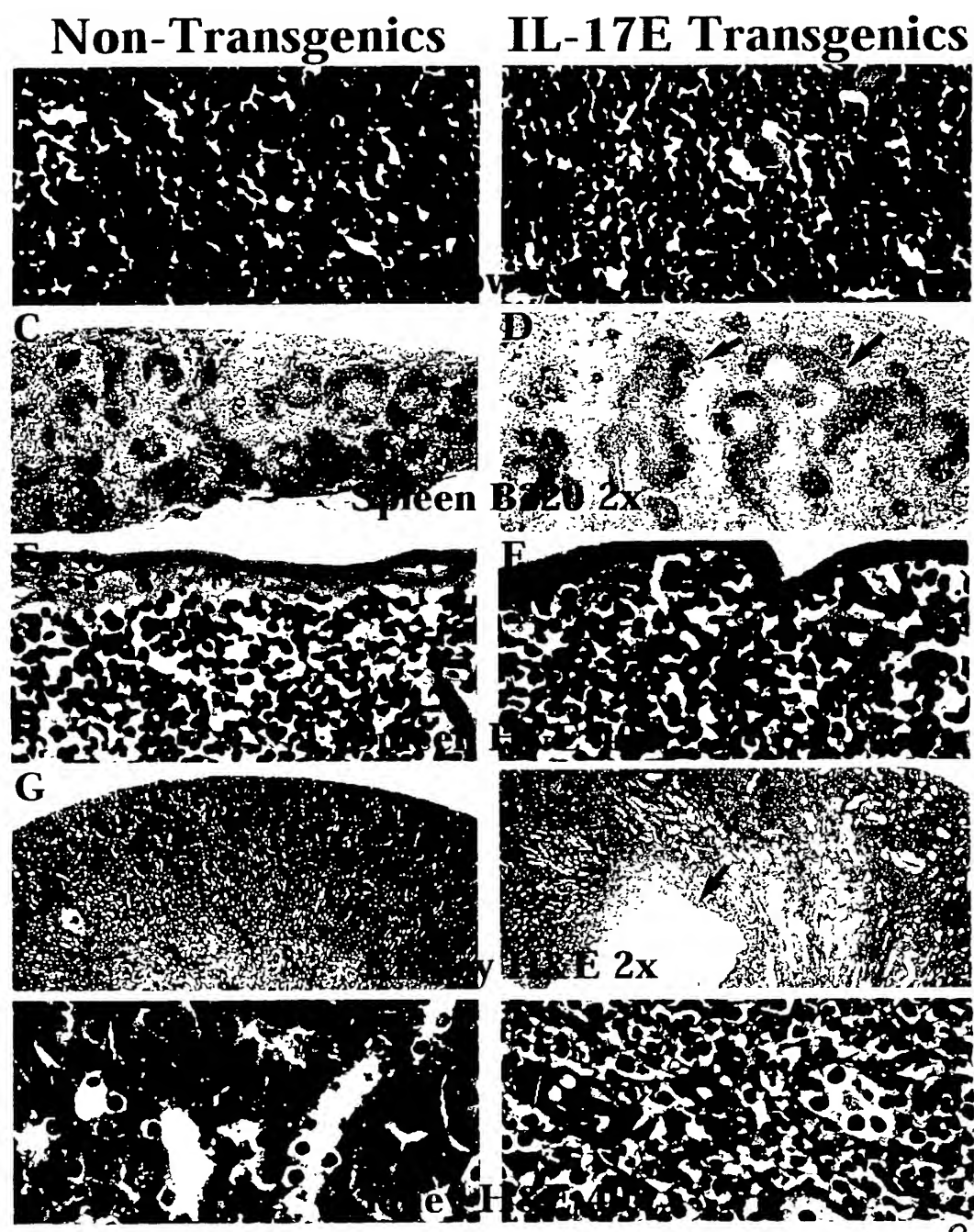
Lymph Node F4/80 2x

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Figure 10



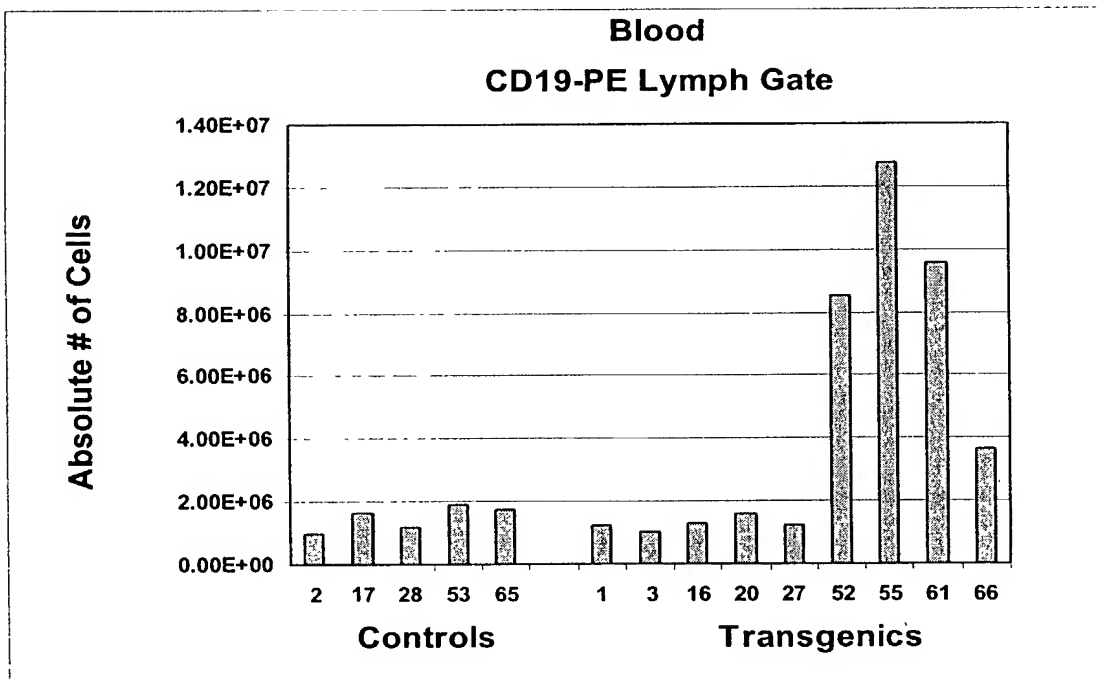
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Figure 11COPY OF PAPERS
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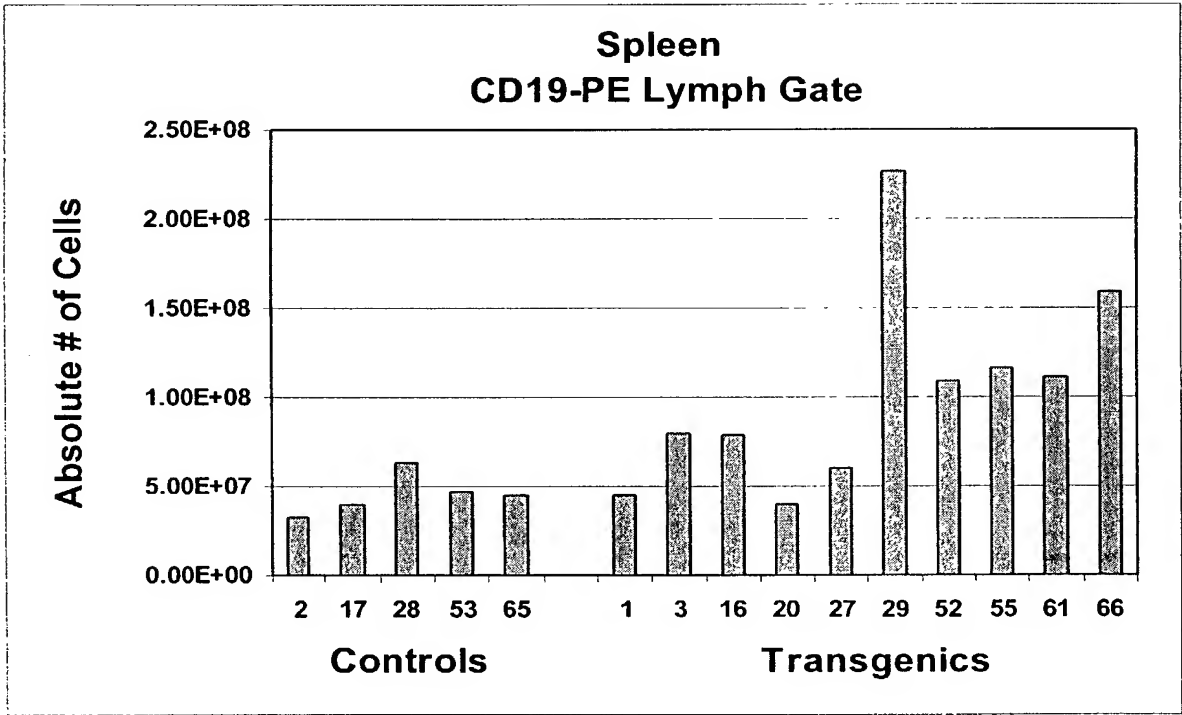
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Figure 12



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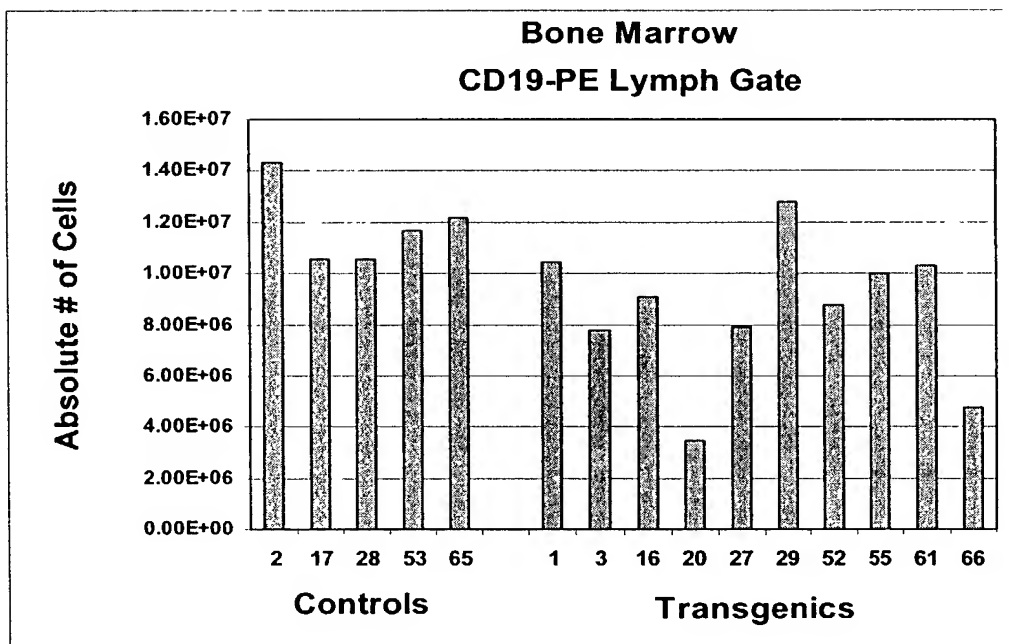
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Figure 13



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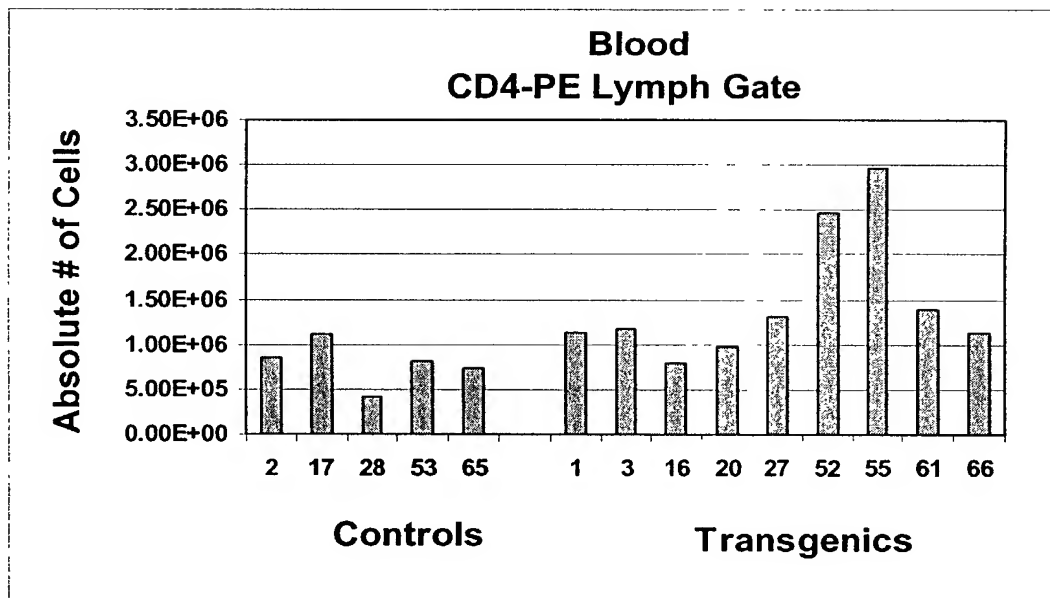
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Figure 14



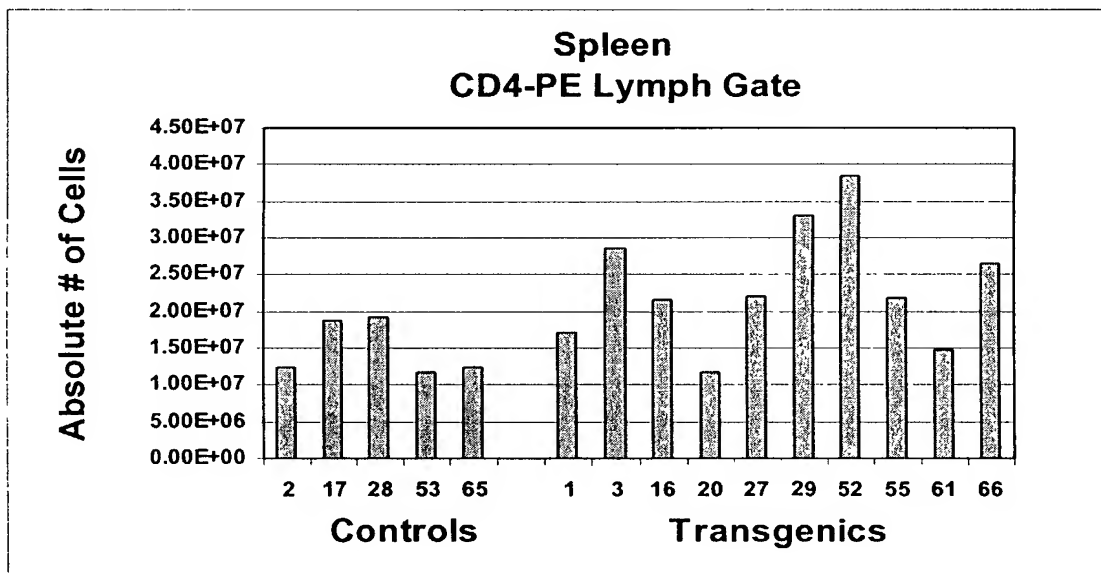
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Figure 15

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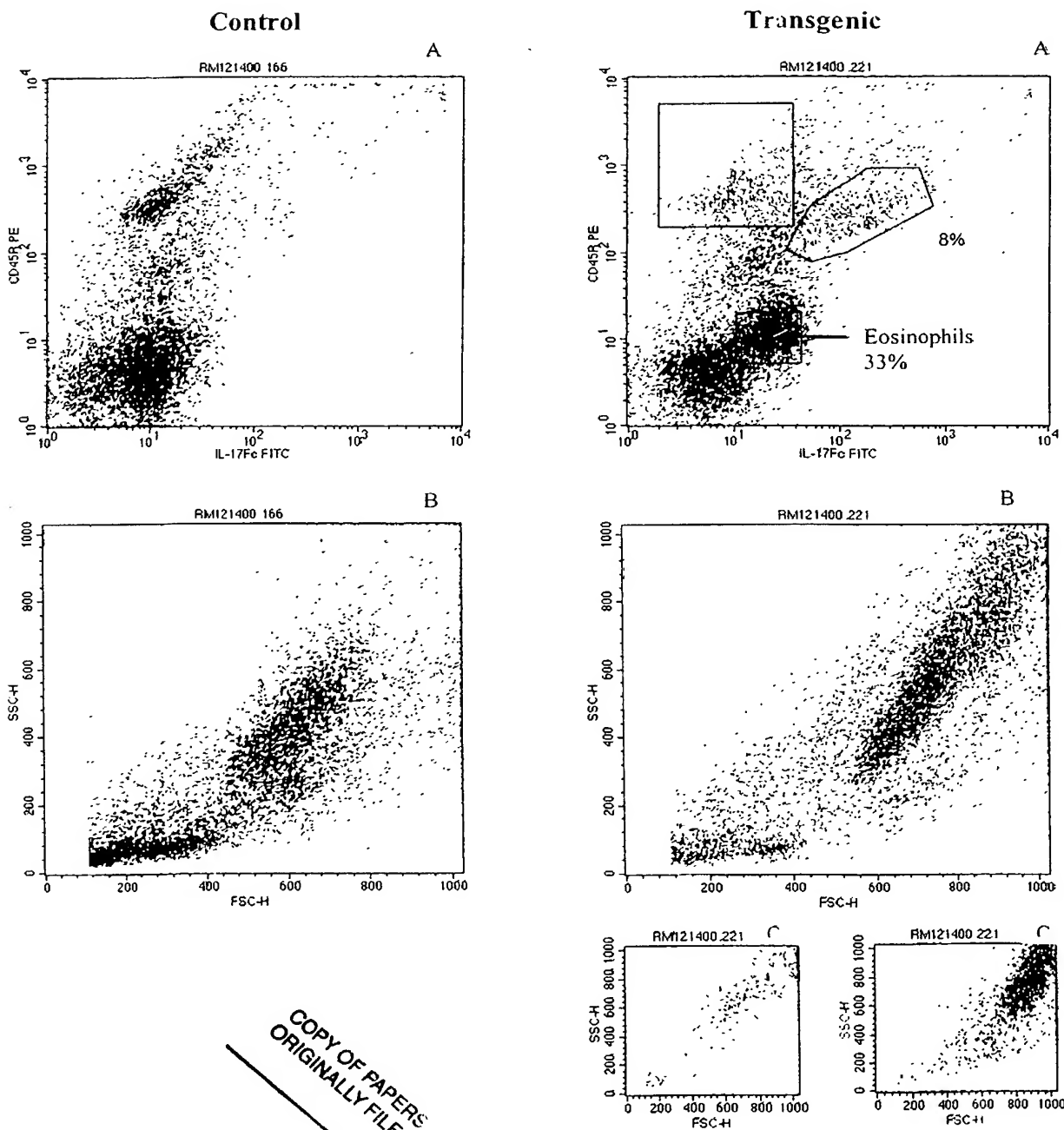
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Figure 16

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CD45R+ CELLS EXPRESSING IL17Br IN TRANSGENIC BONE MARROW



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Granulocyte-like
cells

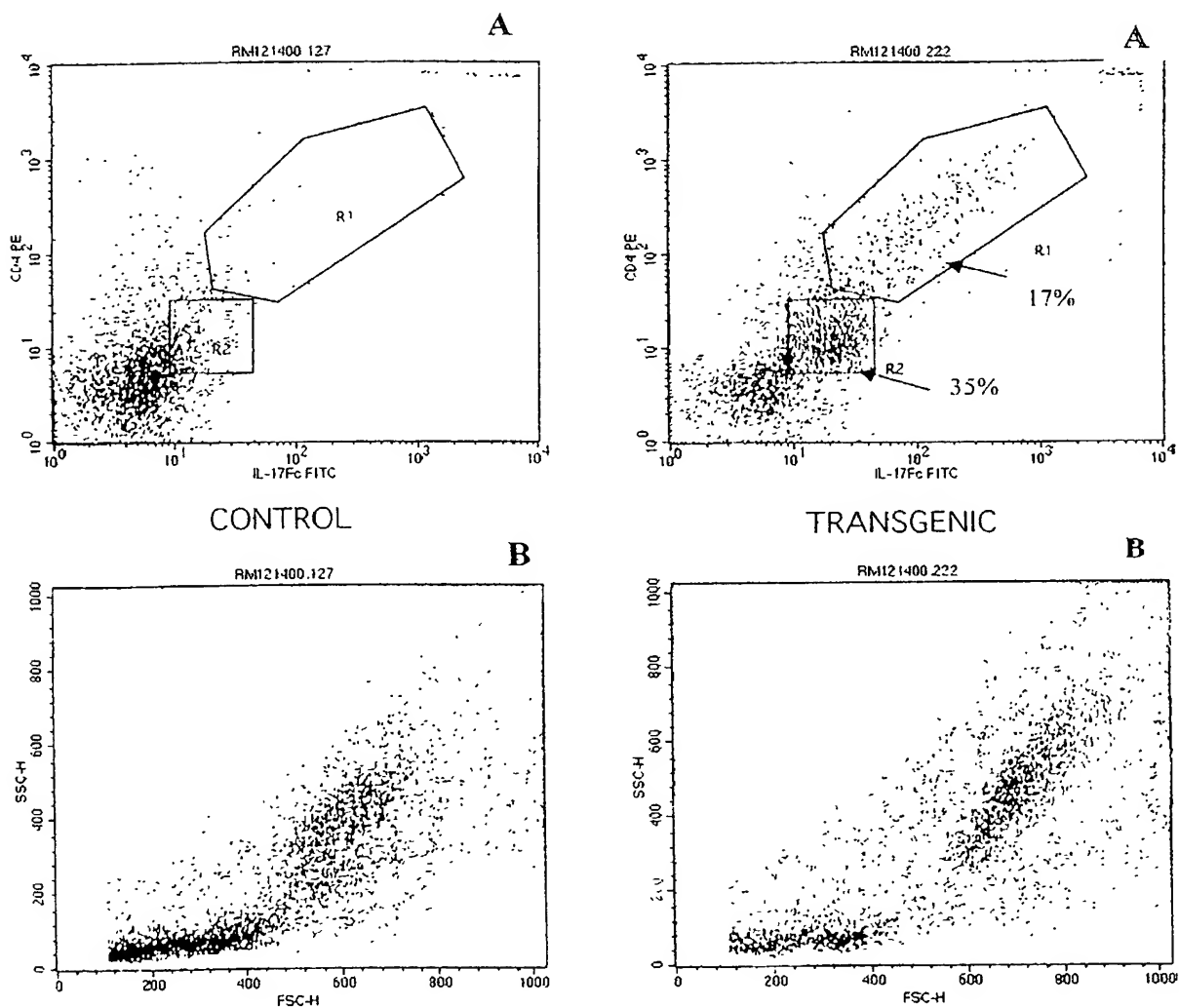
Eosinophil-like cells

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Figure 17

CD4+ CELLS EXPRESSING
IL17Br IN TRANSGENIC BONE
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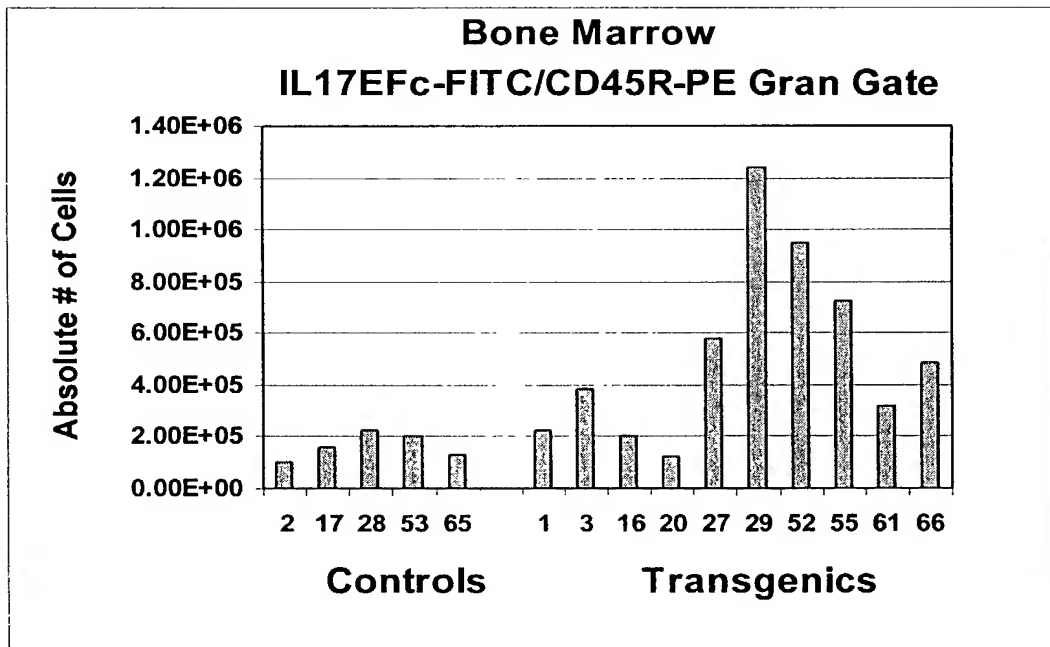
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Figure 18



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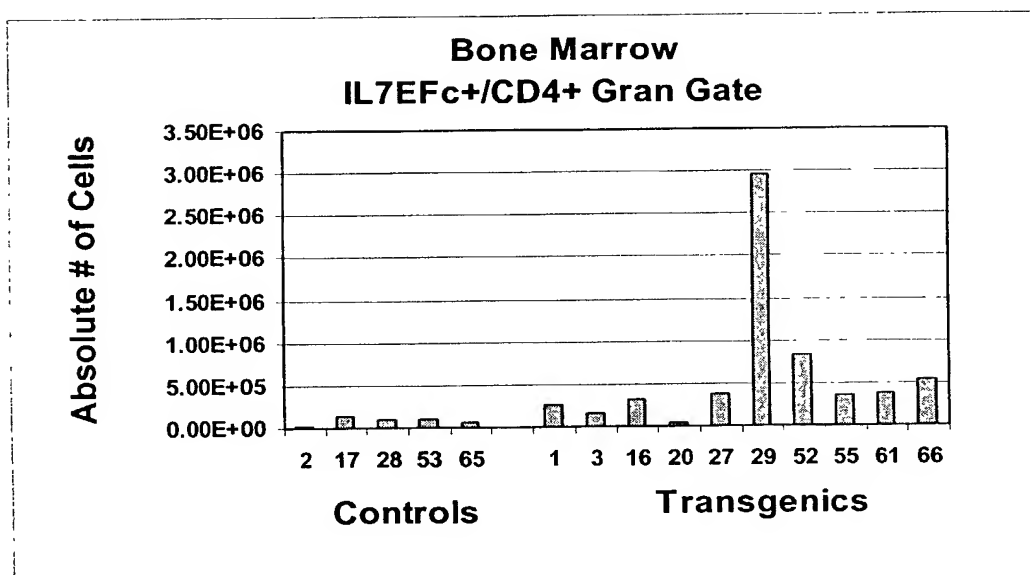
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Figure 19

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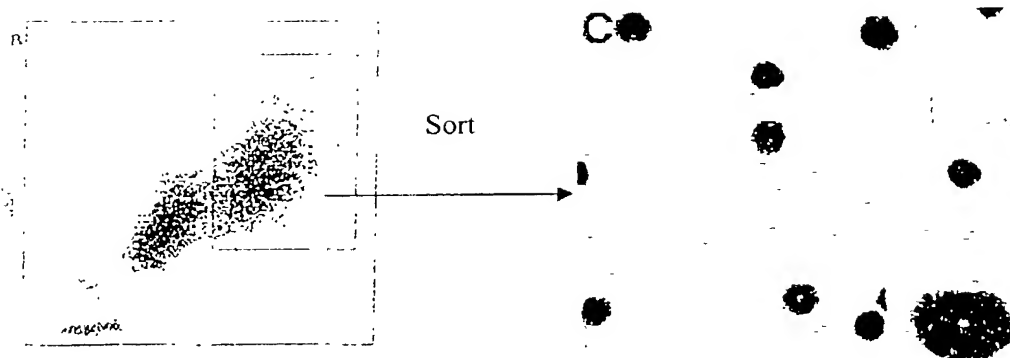
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Figure 20



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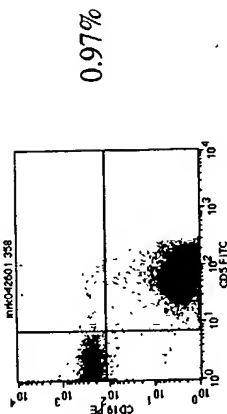
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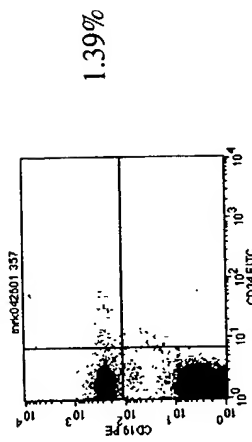
Figure 21A

Non-transgenic Control

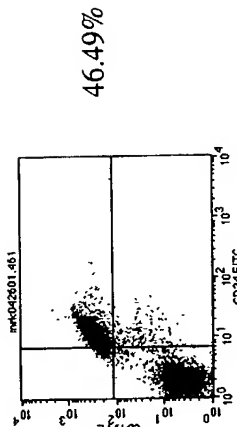
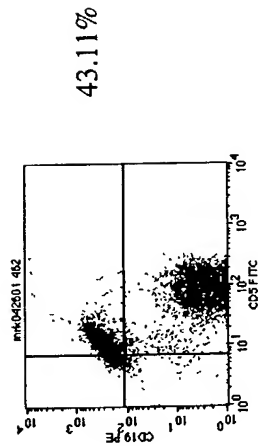
CD5+ on CD19+ Lymphocytes in Lymph Node



CD34+ on CD19+ Lymphocytes in Lymph Node



Transgenic



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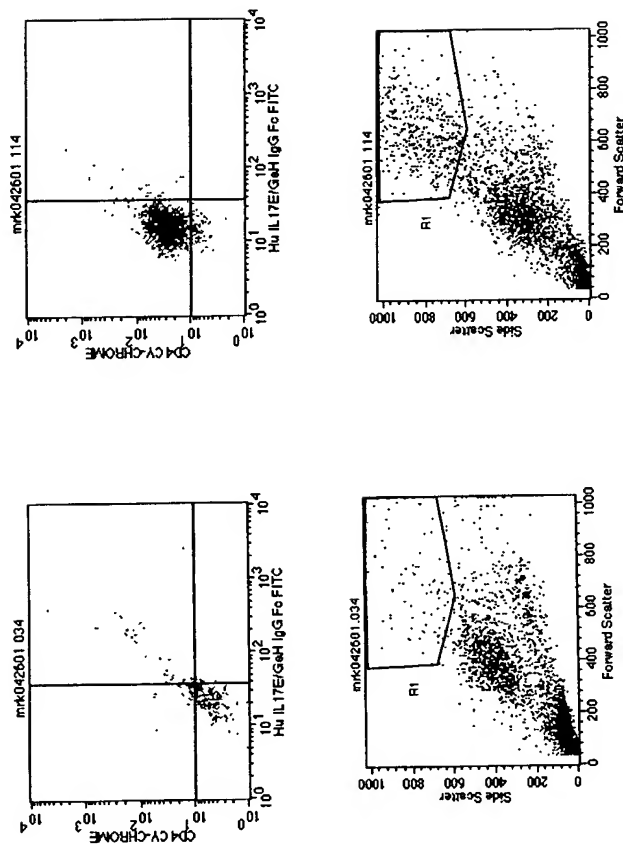


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Figure 21B

CD4 Expression on Eosinophils in Bone Marrow



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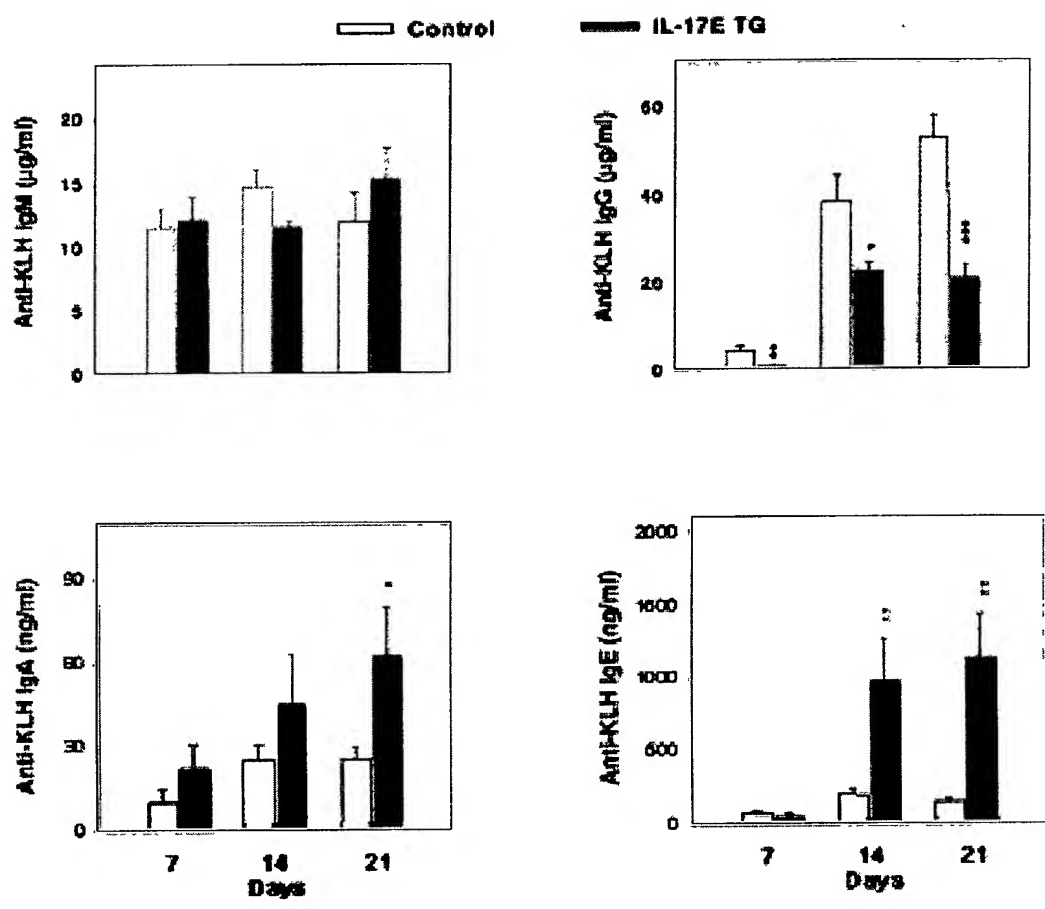


FIG.22

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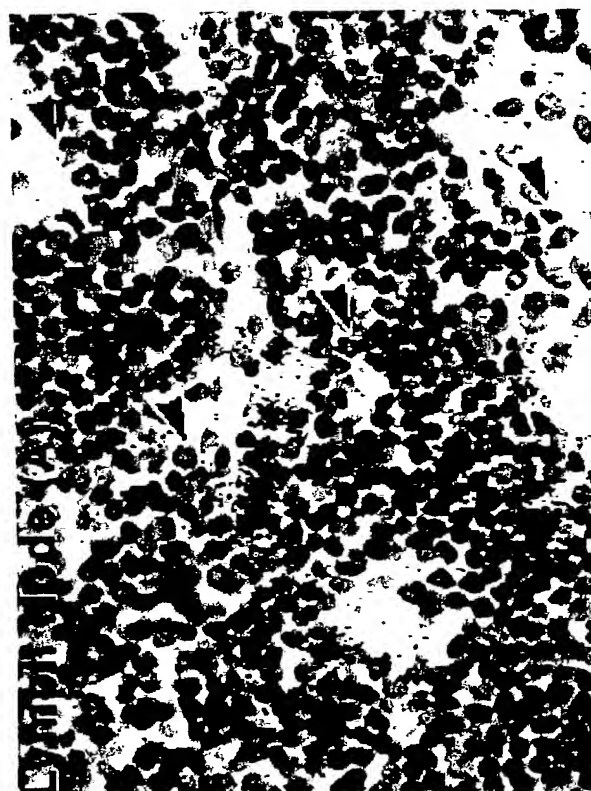


FIG.23